NIEHS and NTP join colleagues at Teratology Society meeting

By Robin Mackar

The Teratology Society (http://www.teratology.org/) is a scientific group with a mission focused on preventing birth defects, including identification of environmental factors that affect maternal health and pregnancy outcomes. The important role this society plays in environmental health was very evident by the number of cutting-edge talks that NIEHS and NTP staff gave at its 53rd annual meeting (http://teratology.org/meetings/2013/agendawed.asp) June 22-26 in Tucson, Ariz.

Cutting-edge technologies

The theme of the annual meeting was Application of Cutting-Edge Technologies to Improve Assessment, Treatment, Prevention, and Communication Regarding Birth Defects. A special plenary lecture on "New experimental approaches for exploring the genetic/epigenetic landscape of environmental exposures" was presented by NIEHS Deputy Director Rick Woychik, Ph.D. He was introduced by Teratology Society President Edward Carney, Ph.D., director of Predictive Toxicology at Dow Chemical Company. Woychik talked about efforts in his own laboratory to use diverse stem cell populations to understand the molecular mechanisms of toxicity.

Cancer and pregnancy symposium

Stemming from their work on the NTP Monograph on Developmental Effects and Pregnancy Outcomes Associated with Cancer Chemotherapy Use During Pregnancy, (http://ntp.niehs.nih.gov/go/36495) Kembra Howdeshell, Ph.D., and Mike Shelby, Ph.D., of NTP’s Office of Health Assessment and Translation (OHAT), organized and co-chaired a symposium on Cancer and Pregnancy: Considerations Regarding the Use of Chemotherapy. Howdeshell provided an overview of the finalized monograph, which was designed as a resource document for the pregnant patient with cancer and her medical team, as they consider treatment options. More than 100 people attended the session, which was co-sponsored by the Organization of Teratology Information Specialists. (http://www.mothertobaby.org/)

The symposium also received funding from NIEHS.

"We are so pleased that we could accommodate this important symposium into our scientific program" said Carney. "NTP did its usual excellent homework and pulled together an impressive panel of speakers." Carney is familiar with NTP products, as he has served as an expert panel member for evaluations of the Center for the Evaluation of Risks to Human Reproduction (now OHAT) and as a member of the NTP Board of Scientific Counselors.

During the afternoon symposium, in addition to Howdeshell’s presentation summarizing the NTP monograph, speakers included cancer and fertility specialists:

- Elyce Cardonick, M.D., an obstetrician at Cooper Health System, who focused on prenatal care for the pregnant cancer patient and the need for registries to document pregnancy outcomes.
- Jennifer Litton, M.D., an oncologist at the University of Texas MD Anderson Cancer Center, spoke about some of the latest methods used for detection and administration of systemic therapies for breast cancer during pregnancy.
- Laxmi Kondapalli, M.D., a reproductive endocrinologist and fertility expert at the University of Colorado Anschutz Medical Campus, updated attendees about the field of oncofertility, or the latest methods in fertility preservation in patients with cancer.

"The information the speakers provided will be of great value to any female cancer patient and her physicians, regarding decision-making for a current pregnancy or preservation of fertility for future pregnancies,” Carney added. Howdeshell said she received some excellent ideas from the panelists and the participants about next steps for disseminating the new monograph.

Diabetes and pregnancy
Gloria Jahnke, D.V.M., of the NTP Office of the Report on Carcinogens, took the lead in heading another session. Chair of the Teratology Society's Public Affairs Committee for the past three years, Jahnke co-chaired a symposium on diabetes and pregnancy with Asher Ornoy, M.D., from the Israeli Teratology Information Service. The symposium was endorsed by the Society for Maternal-Fetal Medicine, and included a stellar panel that focused on addressing how to prevent or treat the increasing number of women with diabetes that become pregnant.

"One of the things I love about the Teratology Society meetings is the diverse group of disciplines represented by those who attend the meetings and make up its membership. It makes every symposium more interesting," Jahnke said.

Other NIEHS staff participating in the meeting included Suzanne Fenton, Ph.D., and Jason Stanko, Ph.D., from the NTP Laboratory Reproductive and Endocrinology Group, and Thad Schug, Ph.D., from the Extramural Research and Training Division.

(Robin Mackar is the news director in the NIEHS Office of Communications and Public Liaison, and a frequent contributor to the Environmental Factor.)